

**Amendments to the Claims:**

1. (currently amended) A semiconductor wafer comprising:  
a substrate;  
a plurality of integrated circuits chips fabricated on said substrate;  
a dicing channel disposed between adjacent ones of said integrated circuits chips, said channel exposing sidewalls of said integrated circuits;  
a layer of first dielectric material disposed on a top surface and sidewalls of said integrated circuits chips; and  
at least one layer of at least one second dielectric material disposed on said layer of first dielectric material, wherein said first dielectric material has a  $G_c$  value of at least about 10 times greater than said second dielectric material.
2. (original) The semiconductor wafer of Claim 1, wherein said first dielectric material has a  $G_c$  value greater than about  $0.1 \text{ kJ/m}^2$ .
3. (original) The semiconductor wafer of Claim 1, wherein said first dielectric material has a  $G_c$  value of about  $0.5$  to about  $2.5 \text{ kJ/m}^2$ .
4. (original) The semiconductor wafer of Claim 1, wherein said second dielectric material has a  $G_c$  value less than about  $0.05 \text{ kJ/m}^2$ .
5. (original) The semiconductor wafer of Claim 1, wherein said second dielectric material has a  $G_c$  value of about  $0.005$  to about  $0.05 \text{ kJ/m}^2$ .
6. (original) The semiconductor wafer of Claim 1, wherein said first dielectric material has a tensile strength of about 20 to 100 MPa.
7. (original) The semiconductor wafer of Claim 1, wherein said second dielectric material has a tensile strength of about 700 to 10,000 MPa.

10/707,713

FIS920030255US1

8. (original) The semiconductor wafer of Claim 1, wherein said first dielectric material is selected from the group consisting of polyesters, phenolics, polyimides, polysulfones, polyether ether ketones, polyurethanes, epoxies, polyarylene ethers, and polyethylene terephthalates.

9. (original) The semiconductor wafer of Claim 1, wherein said first dielectric material is a polyarylene ether.

10. (original) The semiconductor wafer of Claim 1, wherein said second dielectric material is selected from the group consisting of  $\text{SiN}_x$ ,  $\text{SiO}_2$ ,  $\text{SiC}$ , TEOS, FTEOS, FSG, and OSG.

11. (original) The semiconductor wafer of Claim 1, wherein said second dielectric material is  $\text{SiO}_2$ .

12. (currently amended) The semiconductor wafer of Claim 1, wherein said dicing channel exposes sidewalls of said integrated circuits chips and sidewalls of said substrate.

13. (currently amended) The semiconductor wafer of Claim 1, further comprising a plurality of conductors embedded in said first dielectric material and said second dielectric material and in contact with said plurality of integrated circuits chips.

10/707,713

FIS920030255US1

14. (currently amended) The semiconductor wafer of Claim 13, wherein said conductors are ~~S-shaped or spring-shaped or jogged~~.
15. (original) The semiconductor wafer of Claim 1, wherein said semiconductor wafer comprises a plurality of layers of said at least one second dielectric material.
16. (original) The semiconductor wafer of Claim 15, wherein at least one of said layers of second dielectric material is  $\text{SiO}_2$ , and at least one of said layers of second dielectric material is  $\text{SiN}_x$ .
17. (withdrawn) A method of forming an edge seal structure on an integrated circuit chip formed on a substrate, the method comprising:  
etching a channel in a kerf region surrounding the integrated circuit chip, thereby exposing sidewalls of the integrated circuit chip;  
depositing a planarizing layer of first dielectric material on the integrated circuit chip and in the channel; and  
depositing at least one second dielectric material over the first dielectric material, wherein the first dielectric material has a  $G_c$  value of at least about 10 times greater than the second dielectric material.
18. (withdrawn) The method of Claim 17, further comprising the step of embedding conductors in the first dielectric material and the second dielectric material.
19. (withdrawn) The method of Claim 17, wherein the first dielectric material has a  $G_c$  value greater than about  $0.1 \text{ kJ/m}^2$ .

10/707,713

FIS920030255US1

20. (withdrawn) The method of Claim 17, wherein the first dielectric material has a  $G_c$  value of about 0.5 to about 2.5 kJ/m<sup>2</sup>.
21. (withdrawn) The method of Claim 17, wherein the second dielectric material has a  $G_c$  value less than about 0.05 kJ/m<sup>2</sup>.
22. (withdrawn) The method of Claim 17, wherein the second dielectric material has a  $G_c$  value of about 0.005 to about 0.05 kJ/m<sup>2</sup>.
23. (withdrawn) The method of Claim 17, wherein the first dielectric material has a tensile strength of about 20 to 100 MPa.
24. (withdrawn) The method of Claim 17, wherein the second dielectric material has a tensile strength of about 700 to 10,000 MPa.
25. (withdrawn) The method of Claim 17, wherein the first dielectric material is selected from the group consisting of polyesters, phenolics, polyimides, polysulfones, polyether ether ketones, polyurethanes, epoxies, polyarylene ethers, and polyethylene terephthalates.
26. (withdrawn) The method of Claim 17, wherein the first dielectric material is a polyarylene ether.
27. (withdrawn) The method of Claim 17, wherein the second dielectric material is selected from the group consisting of SiN, SiO<sub>2</sub>, SiC, TEOS, FTEOS, FSG, and OSG.
28. (withdrawn) The method of Claim 17, wherein the second dielectric material is SiO<sub>2</sub>.

10/707,713

FIS920030255US1

29. (withdrawn) The method of Claim 17, wherein the channel exposes sidewalls of the integrated circuits and sidewalls of the substrate.
30. (withdrawn) The method of Claim 17, wherein said at least second dielectric material comprises a plurality of layers of dielectric material.
31. (withdrawn) The method of Claim 30, wherein at least one of said layers of second dielectric material is  $\text{SiO}_2$ , and at least one of said layers of second dielectric material is  $\text{SiN}_x$ .

10/707,713

FIS920030255US1